# **Special Issue**

# **Advances in Lightweight Alloys**

## Message from the Guest Editors

We are delighted to organize a Special Issue focusing on advances in lightweight alloys. To meet the requirement of energy saving and emission reduction, lightweight alloys have been widely used in aerospace. automotive, and railway transportation, and so on. Recent research advances enable a better understanding of the relationship between lightweight alloys' composition, microstructure, process, and properties. The papers presented in this Special Issue contain valuable information about the composition design, preparation process, casting, solidification. microstructure, and property analysis of lightweight alloys, including but not limited to aluminum alloy. magnesium alloy, titanium alloy, and lightweight nickelbased superalloy. We hope this Special Issue will contribute to the ongoing discussions on designing high-performance lightweight alloys and developing advanced processing technology.

## **Guest Editors**

Dr. Huarui Zhang

Research Institute for Frontier Science, Beihang University, Beijing 100191, China

Dr. Lina Jia

Research Institute for Frontier Science, Beihang University, Beijing 100191, China

### Deadline for manuscript submissions

closed (30 November 2024)



## Metals

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.3



mdpi.com/si/177540

Metals
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34

mdpi.com/journal/ metals

metals@mdpi.com





# Metals

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.3





## **About the Journal**

## Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

#### **Editors-in-Chief**

## Prof. Dr. Hugo F. Lopez

Department of Materials Science and Engineering, College of Engineering & Applied Science, University of Wisconsin-Milwaukee, 3200 N. Cramer Street, Milwaukee, WI 53211, USA

### Prof. Dr. Yong Zhang

Beijing Advanced Innovation Center of Materials Genome Engineering, State Key Laboratory for Advanced Metals and Materials, University of Science and Technology Beijing, 30 Xueyuan Road, Beijing 100083, China

#### **Author Benefits**

### **High Visibility:**

indexed within Scopus, SCIE (Web of Science), Inspec, Ei Compendex, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Metals and Alloys)

### **Rapid Publication:**

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).